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6 DEVELOPMENT OF AN ORGANIZATIONAL
SURVEY FEEDBACK PROGRAM FOR THE
32D AIR DEFENSE COMMAND.

Donald G. Walizer John R. Mietus

ARI FIELD UNIT, USAREUR

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20. was no GOQ ADP system in U.S. Army-Europe (USAREUR) during the project, systems for processing data and returning results to commanders were built and then used. Interscale correlation and inter-item reliability coefficients were computed. To help assess the impact of the procedures as viewed by commanders, a short evaluative questionnaire was used.

Five of six major indices of the GOQ were left intact; these measured unit climate, supervisory leadership, co-worker interaction, and work group processes. Questions on norms and values, job satisfaction, personal adjustment, family life, and equal opportunity were added. Internal consistency scale reliability coefficients averaged .75. There was no curtailment in the range of item responses. Interscale correlation coefficients are higher than desired in an instrument used for differential diagnoses.

The data processing system was unwieldy but workable. Data feedback was to the top levels of the command, where it had policy impact; and to battery commander, where it had minimal practical impact, as perceived by unit commanders. Recommendations were to refine further the GOQ scales, make the tailored instrument available, replace the ADP system, and change the data feedback procedures. Feedback to unit commanders should be on "profile" forms; it should provide norms for comparison; the commander and immediate subordinates should be involved in discussing the data in several long meetings.

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Technical Report 433

**DEVELOPMENT OF AN ORGANIZATIONAL
SURVEY FEEDBACK PROGRAM FOR THE
32D AIR DEFENSE COMMAND**

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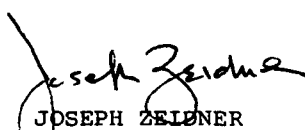
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FOREWORD

The research reported here was accomplished by the Leadership and Organizational Effectiveness Work Unit, U.S. Army-Europe (USAREUR) Field Unit of the U.S. Army Research Institute for the Behavioral and Social Sciences. This unit has as its primary objective the enhancement of combat readiness through research to improve organizational processes. The research is responsive to Army Project 2Q162722A779, Techniques for Organizational Effectiveness and Management Training, FY 79 Work Program.

The complex, rapidly changing environment of the modern Army makes it imperative that organization leadership, climate, and processes function optimally. The Leadership and Organizational Effectiveness Work Unit researches personal, small-group, and macro-organizational functioning in work settings, specifically in USAREUR, in an attempt to increase combat readiness and quality of life. This report details the development of a system designed to diagnose these variables. Research was initiated and data collected by the first author, who left ARI before the project was completed. The second author carried out secondary data analysis and wrote the final report.


JOSEPH ZEIDNER
Technical Director

DEVELOPMENT OF AN ORGANIZATIONAL SURVEY FEEDBACK PROGRAM FOR THE 32D AIR
DEFENSE COMMAND

BRIEF

Requirements:

In the U.S. Army's Organizational Effectiveness Program, the General Organization Questionnaire (GOQ) serves as the primary diagnostic survey instrument for measuring organizational climate. This project (a) tailored the GOQ and its data processing (ADP) and feedback systems to the unique situation of the 32d Air Defense Command (AADCOM) and (b) examined the psychometric properties of the basic GOQ instrument.

Procedure:

The instrument was tailored to the 32d AADCOM's situation. It was administered to more than 2,000 headquarters battery personnel in late 1977. Because there was no GOQ ADP system in U.S. Army-Europe (USAREUR) during the project, systems for ADP and for returning results to commanders were built and used. Interscale correlation and interitem reliability coefficients were computed. A short evaluative questionnaire helped assess the impact of the procedures as viewed by commanders.

Findings:

Five of six major dimensions of the GOQ were left intact. These exhibited minimally adequate item reliability and excessively high interscale correlation coefficients. This suggests it would be inappropriate to use this instrument to attempt pinpoint diagnosis. The data processing system was unwieldy but workable. Data feedback was to the top levels of the command, where it had policy impact; and to battery commanders where, as perceived by unit commanders, it had minimal practical impact. Recommendations were to refine further the GOQ scales, make the tailored instrument available, replace the ADP system, and change the data feedback procedures. Feedback to unit commanders should be on "profile" forms; it should supply norms for comparison; the commander and his immediate subordinates should be involved in discussing the data in several long meetings.

Utilization of Findings:

The findings of this study provided an empirical base for improving the utility of this organizational effectiveness instrument. Principal users of these findings are the Organizational Effectiveness Center and School and the Organizational Effectiveness Staff Officers in the 32d Air Defense Command.

DEVELOPMENT OF AN ORGANIZATIONAL SURVEY FEEDBACK PROGRAM FOR THE 32D AIR DEFENSE COMMAND

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DEVELOPMENT OF AN ORGANIZATIONAL SURVEY FEEDBACK PROGRAM
FOR THE 32D AIR DEFENSE COMMAND

INTRODUCTION

The Department of the Army initiated an Organizational Effectiveness program in the mid-1970s. Organizational Effectiveness is defined as follows:

Organizational Effectiveness (OE). A systematic adaptation of OD by the Army for the purpose of strengthening the chain of command, increasing individual and unit effectiveness, and improving the quality of life in an Army community. OE is implemented as a phased process that is tailored to the unique requirements of a particular Army unit, controlled by that unit's leader or commander, and normally supported by an Organizational Effectiveness Staff Officer. The primary steps of OE include:

- (1) Assessment of organizational processes.
- (2) Chain of command action planning.
- (3) Implementation of planned actions.
- (4) Evaluation and follow-up.

Organization Development (OD). A technology which involves the combined application of behavioral and management sciences methods:

- (1) to understand more clearly how persons in an organization communicate with each other and how they affect and are affected by the structures, procedures, and work environments of the organization, and (2) to use this knowledge and understanding to reinforce organizational strengths and make practical and systematic improvements in the way the organization functions.
- (HQ DA Letter 600-76-2, May 1976)

Survey feedback is a specific OE technique in which a survey instrument measuring organizational climate is administered to unit personnel by an Organizational Effectiveness Staff Officer (OESO). Based on the results of the survey, the OESO and the commander plan organization improving actions.

During 1974 and 1975 in U.S. Army-Europe (USAREUR), the Army Research Institute (ARI) conducted a pilot survey feedback project to assess the value of a particular form of survey feedback technology and to develop tools and instrumentation (Holmes, 1977). Commanders felt that survey feedback was useful in promoting insight and communication. Company commanders particularly believed that quarterly surveys would provide useful management information. This pilot effort established a recognized need and use for the survey feedback technique in USAREUR.

In 1975, the Organizational Effectiveness Training Center (OETC) made the General Organization Questionnaire (GOQ) available to OESOs. The GOQ is a standardized, machine-scored organizational questionnaire patterned after the Institute for Social Research's "Survey of Organizations" (Taylor & Bowers, 1972). All OESOs are trained in its use at OETC. Soon after the GOQ was made available, it became apparent that some tailoring was needed to

address the specific organizational diagnosis requirements and operational characteristics of the 32d Air Defense Command (AADCOM). Furthermore, there was a need to develop a quick turnaround from survey administration to feedback to insure that unit commanders received timely and useful data.

OBJECTIVES

This report briefly describes the accomplishment of three goals:

1. To tailor the GOQ to the 32d AADCOM situation and to examine the psychometric properties of the GOQ as they reflect the quality of the survey instrument;
2. To develop a rapid turnaround, cost-effective data processing and analysis system; and
3. To develop a client-oriented data feedback system.

In brief, the GOQ was tailored to the 32d AADCOM requirements and characteristics. Data were collected on a sample of line and HQ batteries, and a method of scoring and analyzing the data was built and implemented. Results were fed back to commanders by letter and by the 32d AADCOM OESOs. Afterward, unit leaders and OESOs were sampled as to their judgments on the process. Some psychometric properties of the instrument were also determined.

TAILORING THE SURVEY INSTRUMENT

The Survey Instrument

The tailored instrument, termed the Organization Survey (OS), was based on the GOQ. The Army adopted the GOQ as a standard instrument in the mid-1970s; the GOQ measures 21 dimensions of social organization functioning. Major GOQ indices and question patterns closely resemble the "Survey of Organizations" of the Institute for Social Research, a well-researched instrument containing considerable reliability and validity information (Taylor & Bowers, 1972). When this research began in 1977, reliability and validity information on the GOQ were not yet available.

The basic GOQ instrument consists of 84 items comprising 21 indices, a section in which commanders can add their own questions, and a section for demographic information. The GOQ indices are shown in Table 1.

Table 1
GOQ Dimensions and Indices

	Items numbered	Total no. of items
<u>I. Unit Climate</u>		
1. Communication Flow	1- 2	2
2. Decisionmaking	3- 6	4
3. Motivation	7-10	4
4. Integration of Personnel and Mission	11-16	6
5. Identification With Unit	17-19	3
6. General Climate	20-27	8
		<u>27</u>
<u>II. Supervisory Leadership</u>		
1. Support	28-31	4
2. Teamwork	32-33	2
3. Goal Emphasis	34-37	4
4. Work Facilitation	38-43	6
5. Influence	44-45	2
		<u>18</u>
<u>III. Co-Worker Interaction</u>		
1. Support	46-47	2
2. Teamwork	48-51	4
3. Work Facilitation	52-53	2
4. Peer Influence	54-55	2
		<u>10</u>
<u>IV. Work Group Processes</u>		
1. Coordination	56-57	2
2. Readiness	58-65	8
3. Discipline	66-67	2
4. Intergroup Cooperation	68-69	2
		<u>14</u>
<u>V. Effects on Personnel</u>		
1. Satisfaction	70-74	5
2. Equal Opportunity	75-84	10
		<u>15</u>
TOTAL		84

The present Organizational Survey retains intact 19 of the original 21 GOQ organizational processes indices; Table 1 lists the 19 as Dimensions I through IV. Modifications to the GOQ include substantial changes in the Effects on Personnel indices in Dimension V; only the Equal Opportunity index was retained. The Satisfaction index was changed to measure job satisfaction, and indices of morale and effects on family life were added. Also added was a section measuring organizational norms and values. The demographic section of the GOQ was dropped, and two questions on rank and sex of the respondents were added to the OS. The capability of adding commander's questions was retained. Table 2 shows the final composition of the OS; a copy of the instrument is in Appendix A.

The four Family Life items added to the OS were developed largely at the request and with the assistance of the 32d AADCOM OESOs. Items for the Job Satisfaction and Personal Adjustment (morale) indices were selected from items used in previous ARI research programs. The Unit Norms and Values items came from interviews of 32d AADCOM personnel conducted as part of a previous ARI contract.

Data Collection

A pilot test of the OS and related systems was conducted from March through June 1977. This test was run with eight current OESO clients, line batteries in the 32d AADCOM. A total of 654 usable surveys was obtained. The pilot was designed primarily to test the analysis and feedback portions of the system, although it did result in some minor item wording changes in the Unit Norms and Values index.

During August 1977, a survey of all HQ batteries within the 32d AADCOM was conducted in the first operational phase of the system's existence. A total of 2,167 usable surveys was received. These data, in conjunction with data from the pilot phase, provided a basis for examining the psychometric properties of the instrument. Coefficient Alpha, a measure of internal consistency reliability, was computed for each of the OS indices; interscale correlation analyses were also performed.

Psychometric Properties

Table 3 shows Alpha reliability coefficients for both the pilot and the operational surveys. The pilot data came from line batteries (N = 654), and the operational data came from HQ batteries (N = 2,167). The Organizational Processes indices (1-19) and the Equal Opportunity index are identical to those in the GOQ and provide information on that instrument.

Table 2

Organizational Survey
Dimensions and Indices

	Items numbered	Total no. of items
I. <u>Unit Climate</u>		
1. Communication Flow	1- 2	2
2. Decisionmaking	3- 6	4
3. Motivation	7-10	4
4. Integration of Personnel and Mission	11-16	6
5. Identification with Unit	17-19	3
6. General Climate	20-27	8
		<u>27</u>
II. <u>Supervisory Leadership</u>		
1. Support	28-31	4
2. Teamwork	32-33	2
3. Goal Emphasis	34-37	4
4. Work Facilitation	38-43	6
5. Influence	44-45	2
		<u>18</u>
III. <u>Co-Worker Interaction</u>		
1. Support	46-47	2
2. Teamwork	48-51	4
3. Work Facilitation	52-53	2
4. Peer Influence	54-55	2
		<u>10</u>
IV. <u>Work Group Processes</u>		
1. Coordination	56-57	2
2. Readiness	58-65	8
3. Discipline	66-67	2
4. Intergroup Cooperation	68-69	2
		<u>14</u>
V. <u>Unit Norms and Values</u>	80-96	17
VI. <u>Individual Outcomes</u>		
1. Equal Opportunity	70-79	10
2. Job Satisfaction	97-100	4
3. Personal Adjustment	101-105	5
4. Family Life	106-109	4
		<u>23</u>
VII. <u>Demographic Information</u>		
1. Rank	110	
2. Sex	111	
TOTAL		111

Table 3

Internal Consistency Reliability Coefficients (Coefficient Alpha) for Organizational Survey Indices

Index dimension and name	Test Phase	
	Pilot	Operational
A. Organizational Processes		
1. Communication Flow	.49	.54
2. Decisionmaking	.67	.74
3. Motivation	.63	.67
4. Integration of Personnel and Mission	.63	.73
5. Identification with Unit	.69	.68
6. General Climate	.60	.69
7. Supervisory Leadership Support	.81	.83
8. Supervisory Leadership Teamwork Emphasis	.76	.75
9. Supervisory Leadership Goal Emphasis	.81	.82
10. Supervisory Leadership Work Facilitation	.81	.81
11. Supervisory Leadership Influence	.66	.73
12. Co-Worker Interaction Support	.74	.71
13. Co-Worker Interaction Teamwork	.87	.87
14. Co-Worker Interaction Work Facilitation	.77	.76
15. Co-Worker Peer Influence	.57	.57
16. Work Group Coordination	.76	.78
17. Work Group Readiness	.70	.77
18. Work Group Discipline	.81	.80
19. Intergroup Cooperation	.65	.70
B. Unit Norms and Values	.85	.89
C. Individual Outcomes		
1. Equal Opportunity	.78	.83
2. Job Satisfaction	.79	.81
3. Personal Adjustment	.73	.78
4. Family Life	.68	.68

Internal consistency scale reliability coefficients in the pilot study varied from .49 to .87, with a mean of .72; the operational phase study obtained internal consistency scale reliability coefficients from .54 to .90, with a mean of .75. The four supervisory indices--Support, Goal Emphasis, Teamwork, and Work Facilitation--had coefficients of internal consistency ranging from .75 to .83. These coefficients contrast to the .85 to .94 range reported for similar indices in the "Survey of Organizations" (Taylor & Bowers, 1972), a standard against which other similar instruments can be judged.

The range of index scores theoretically can be from 1 to 5. The average of the indices means is 3.24; the highest index mean score is 3.88, and the lowest is 2.75. The average of the indices' standard deviations is .98, with a range of 0.73 to 1.21. This indicates that a curtailment of range problem does not exist that could limit the instrument's reliability and validity potential.

Tables 4 through 8 present the interscale correlation coefficients grouped into major dimensions. The correlations are corrected for index unreliability by the formula $r_{TG} = r_{tg} / \sqrt{r_{tt} r_{gg}}$, where r_{TG} = correlation between true components of t and g ; r_{tg} = obtained correlation; r_{tt} and r_{gg} = alpha reliability coefficients. These coefficients show the "true" correlation between indices; that is, they show the correlation coefficients that would exist if the indices were perfectly reliable and if each item in a scale faithfully represented the total scale in all significant respects. This relationship is useful for understanding the amount of theoretical common variance between indices and hence the nature of organization climate, leadership, and group processes. It is equally important for an OESO to know the amount of shared variance between indices when explaining survey results to unit leaders. Squaring the reported coefficients provides an indication of the extent to which variability in any index overlaps or duplicates variability in another index.

For example, the degree of overlap in the four primary supervisory indices--Support, Teamwork Emphasis, Goal Emphasis, and Work Facilitation--ranges from a low of 62% shared variance for both Goal Emphasis/Support and Goal Emphasis/Work Facilitation to a high of 81% shared variance for Support/Teamwork. Therefore, for any pair of these four supervisory indices, approximately 60% to 80% of the variability in one index is shared by the other index, and approximately 20% to 40% of the variability in each index is independent of the other. Thus, no index completely duplicates another, although there is a very high degree of overlap. These figures are higher than those for comparable indices of the "Survey of Organizations," after which these indices and items are modeled (Taylor & Bowers, 1972).

All the indices groupings could be looked at similarly. In general, there is extensive duplication between indices within dimensions except for the Individual Outcome indices developed specifically for the OS. On the basis of this one organization sample and of this simple analysis, however, there is not sufficient justification to combine indices. Further scale analyses were not conducted because revision of the GOQ was outside the scope of this project. Furthermore, a new climate survey instrument is under development by ARI. However, there are enough data to state that pinpoint diagnoses of an organization's climate should not be attempted solely with the OS or the GOQ.

Table 4

Unit Climate Interscale Correlation Coefficients,
Corrected for Unreliability

Indices	Decision- making	Motivation	Integration of personnel and mission	Identification with unit	General climate
Communication Flow	.86	.55	.79	.64	.69
Decision- making		.61	.84	.69	.76
Motivation			.84	.72	.72
Integration of Personnel and Mission				.87	.87
Identification With Unit					.76

$p < .001$ for all entries.

Table 5

Supervisory Leadership Interscale Correlation Coefficients
Corrected for Unreliability

Indices	Teamwork Emphasis	Goal Emphasis	Work Facilitation	Influence
Support	.90	.79	.86	.78
Teamwork Emphasis		.87	.83	.77
Goal Emphasis			.79	.75
Work Facilitation				.88

$p < .001$ for all entries.

Table 6

Co-Worker Interaction Interscale Correlation Coefficients
Corrected for Unreliability

Indices	Teamwork	Work Facilitation	Peer Influence
Support	.90	.86	.75
Teamwork		.95	.71
Work Facilitation			.77

$p < .001$ for all entries.

Table 7

Work Group Processes Interscale Correlation Coefficients
Corrected for Unreliability

Indices	Readiness	Discipline	Intergroup Cooperation
Coordination	.77	.63	.64
Readiness		.65	.70
Discipline			.65

$p < .001$ for all entries.

Table 8

Individual Outcome Interscale Correlation Coefficients
Corrected for Unreliability

Indices	Job Satisfaction	Personal Adjustment	Family Life
Equal Opportunity	.66	.57	.43
Job Satisfaction		.50	.41
Personal Adjustment			.58

$p < .001$ for all entries.

Table 9

Interdimension Correlation Coefficients,
Not Corrected for Unreliability

Dimension	Supervisory Leadership	Co-Worker Interaction	Work Group Process	Unit Norms and Values	Individual Outcomes
Unit Climate	.65	.55	.68	.60	.71
Supervisory Leadership		.59	.68	.42	.56
Co-Worker Interaction			.74	.36	.53
Work Group Process				.44	.62
Unit Norms and Values					.59

$p < .001$ for all entries.

DATA PROCESSING PROCEDURES

Data processing procedures were designed with several goals in mind: (a) rapid turnaround, (b) minimum error rate, (c) minimum OESO time requirements, and (d) printouts suitable for OESO and client use.

Because programming assistance was not available from either the ARI field unit or USAREUR, the Statistical Package for the Social Sciences (SPSS) was used to perform all data processing functions. The SPSS was easily used by field unit personnel, and it provided complete data analysis capabilities and fully labeled printouts suitable for use in the client feedback system.

An optical scan system was used to transpose subject responses to computer-ready inputs. This system was chosen to minimize error rate, improve turnaround time, and reduce demands on OESOs. The available military optical scan system was judged inadequate for this purpose; it required multiple answer sheets, was intolerant of answer sheet problems, and provided card-punch computer input that increased clerical demands and error potential. Thus, this service was contracted to a German firm using different hardware. The German system allowed all responses to be made on one sheet and provided computer input on a tape format. The rejection rate due to answer sheet problems was less than .5%.

However, the resulting data processing steps involved a complicated procedure. The tape from the German firm had to be translated by the Honeywell facility at Campbell Barracks, Heidelberg, to a format acceptable to the IBM facility that had the SPSS capability. Data cleaning and file building were time-consuming procedures because the IBM facility accepted only batch processing and usually gave only a 24-hour turnaround. The average turnaround time was 2 weeks with this processing system. These procedures would be unacceptable in an operational system because the 2-week turnaround would limit the usefulness of the data for organization leaders.

DATA FEEDBACK PROCEDURES

Method

The basic data feedback provided to a commander was a computer printout containing fully labeled response frequency distributions, means, and medians for 111 items. Each commander also received a letter explaining how to understand the printout (Appendix B) and a description of the meanings of the indices (Appendix C). Finally, the 32d AADCOM OESOs were available to counsel commanders, and commanders were urged to use this resource.

Several steps were taken to insure that the data feedback would be used for diagnostic purposes and not to evaluate people or units. First, each unit through battery level in the 32d AADCOM was assigned a unique four-digit code number known only by the ARI scientists and the OESOs. This unit code was the only identifier used on answer sheets, computer storage, and printouts. Second, a unit's data were made available only to the unit commander, in a composite format not broken down by section. Finally, individual anonymity was preserved by suppressing all data in which fewer than five respondents could be located in any analysis category (rank, sex, or section).

OESOs supplement the basic printout with tables showing the most positive and most negative aspects of the data. Generally, negative areas were items on which one-third or more of the responses were "Somewhat Disagree" or "Strongly Disagree" for positively worded items, and "Somewhat Agree" or "Strongly Agree" on negatively worded items. Positive areas were usually items on which 75% or more of the responses were "Somewhat Agree" or "Strongly Agree" for positively worded items, or the reverse for negatively worded items.

Additional analysis of the data was possible, and commanders were told they could get further data breakdowns by sex or rank.

An overall report, Third Report to the Commander, was sent to the Commanding General. This report showed and interpreted overall trends in the survey data. This report is not included here because the data are confidential to the 32d AADCOR.

To assess the impact of the feedback procedure, a short questionnaire was sent to a sample of commanders who had received data.

Results

The overall effects of the data feedback and survey project were mixed. The Third Report to the Commander resulted in top level planning; several actions were initiated. The Commanding General used information from the report to brief incoming commanders on the overall organizational climate and to tell them which areas of leadership he wanted them to stress. The Third Report to the Commander also served the G-1 and OESOs as an information base for planning a human resources development program for the command. That program has been started.

However, the data feedback effects on unit commanders' ways of running their units seemed minimal. Results of the postfeedback questioning of commanders are in Table 10.

The commanders who responded (N = 7) felt the survey was of limited value. Little activity resulted from the feedback at the battery level.

The OESOs reported they found it very difficult to move from the data to action planning with their clients. The data indices had little operational meaning to the OESOs or their clients. It was not clear to the OESOs what a particular combination of index scores indicated about an organization, nor what should be done as a result.

Table 10

HQ Staff Survey Questionnaire Results

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
1. To what extent have the survey data been useful to you as a commander?	0	0	4	3	0
2. To what extent have the survey data helped you learn new things about your unit?	0	1	4	2	0
3. To what degree are you personally committed to use the survey data?	0	2	2	2	1
4. Have you discussed the results of the survey with the Officers and/or NCOs of your unit? (Please check one) __YES __NO	-	YES 5	NO 1	-	-
5. If you replied "yes" to question 4, to what extent did you find these discussions valuable?	0	0	5	0	0
6. Have you discussed the survey results with your superior? (Please check one) __YES __NO	-	YES 1	NO 5	-	-
7. If you answered "yes" to question 6, to what extent did you find these discussions valuable?	0	0	1	0	0
8. How accurately do you believe the survey data described the perceptions of the Officers, NCOs, and Enlisted Persons in your unit?	0	0	6	0	0

Table 10 (continued)

HQ Staff Survey Questionnaire Results

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
9. How helpful were the instructions for interpreting the computer printout(s)?	0	1	1	3	2
10. To what extent were you able to understand the computer printout(s)?	0	0	1	3	3
11. To what extent have you taken actions based on the survey data?	1	1	4	1	0
12. Would you like to have similar surveys in the future?	1	0	1	3	2
13. How often should a survey of this nature be conducted? (Please check one)					
_____ A. Never					
_____ 4 _____ B. Quarterly					
_____ 1 _____ C. Semi-Annually					
_____ 3 _____ D. Annually					
_____ E. Other (Specify) _____					
14. How would you prefer to receive the computer printout(s)? (Please check one)					
_____ 3 _____ A. Mail, as I did this time					
_____ 1 _____ B. Through command channels					
_____ 2 _____ C. Delivered and discussed by OESO					

Table 10 (continued)

HQ Staff Survey Questionnaire Results

-
15. Comments: Data limited use; need executive summary. No one seemed to
get excited about survey. Results in question because number of female
respondents was too large to be true. Keep out of command channels if
youngsters are to be receptive to survey. Expand to facilities.
-

CONCLUSIONS AND RECOMMENDATIONS

The OS and its parent instrument, the GOQ, exhibit minimally sufficient psychometric qualities. Therefore, one would be prudent to use them only as rough gauge, but broad-ranging, diagnostic instruments. The indices are not sufficiently refined for finely honed diagnoses. Internal consistency scale reliabilities are low, and interscale correlation coefficients show considerable duplication between indices. Nevertheless, the instruments survey a broad range of areas of organizational functioning. Results from these instruments, when combined with other data about an organization, could prove useful to the OESO. It was not the purpose of this research effort to study comprehensively the psychometric characteristics of the OS or the GOQ. These preliminary results indicate that further psychometric study and scale development are advisable if the GOQ is to continue in use as a standard Army instrument. If a new organizational climate survey is developed, it could replace or supplement the GOQ, making further GOQ scale development unnecessary.

New scales were developed to measure (a) organization norms and values, (b) effects of job on family life, (c) morale, and (d) job satisfaction. Although these scales also have minimally adequate psychometric properties, they should be made available to OESOs so the officers can tailor the GOQ more specifically to their client organization's needs.

The data reduction methods used in this study are cumbersome and unsatisfactory for operational use. Turnaround time is long, and continued use of this system involves ARI in the process. Printouts are difficult for the OESO or military manager to interpret. OESOs in the 32d AADCOM and USAREUR in general should have a data reduction system that is simple to understand and implement and that does not involve ARI. Also, the turnaround time should be 1 to 1-1/2 weeks so that the data feedback is relevant and useful to the client. An updated version of the GOQ program will soon be available at corps level computer facilities and is now available at Headquarters, USAREUR. This system should be used in place of the present ARI-developed system.

Finally and most importantly, the data feedback procedures had the least impact in batteries, the organization components they were intended to affect most heavily. Their greatest impact was at the highest levels of the command. A possible reason for this is the matching of the mode of feedback and the level of the organization. Feedback to the top levels of the command was technical, interpretive, and designed to elicit an intellectual response; this it did. Feedback to the battery commanders was technical, intellectually oriented (e.g., data printout, abstract discussion of indices) and was intended to elicit behavioral acts to change unit functioning. The limited information from OESOs and the postintervention survey suggest that very little behavioral change and only minimal thinking about the data's meaning occurred. This is consistent with the general research literature on social and organizational change. Also, the cost effectiveness of survey feedback at the battery commander level may be questioned. Commanders at this level are busy responding to other demands and perhaps have not had sufficient staff experience to understand the value or meaning of this type of data.

The data feedback procedure available to the OESOs involved data that were numerically displayed on computer printouts and analyzed in several ways. The OESOs had difficulty in interpreting these data and in recommending changes at the battery level. Improvements in this system could be made in three areas. First, specifically designed feedback forms that display organization data both numerically and in profile form should be built.

Second, norms should be developed and used against which to compare a particular battery's data. In the present research, the same arbitrary point was chosen on each item as the minimally "good" score, or the highest and lowest scores were contrasted. However, research by the Institute for Social Research shows different organizations have different mean scores, as do different items; the percentile score is what matters (Hauser, Pecorella & Wissler, 1977). Therefore, providing even tentative norms to OESOs would help.

Third, survey-guided development techniques could be used at the battery level. In survey-guided development (Bowers & Franklin, 1977) the OESO and battery commander would hold several long meetings with the commander's immediate subordinates to discuss their own work group's data and suggest changes in the way they work together. In other meetings, battery-wide data would be discussed. Data, in both cases, would be fed back on specifically designed forms and compared to norms. Although this procedure would be much more time consuming, and only few units could be handled at one time, there would be heightened probability that behavioral changes would occur. The discussions themselves would be an intervention, and suggestions for further intervention, if desired, would flow out of the meetings. A survey-guided development intervention would also alleviate the need for a more psychometrically refined GOQ. The GOQ in this type of intervention would simply serve as a stimulus to discussion and would not be used for pinpoint diagnoses. At upper levels in the 32d AADCOM, combined data would continue to be fed back as it was in the Third Report to the Commander. This technical, interpretive survey feedback mode is appropriate at that level and has been effective.

REFERENCES

- Bowers, D. G., & Franklin, J. L. Survey Guided Development I: Data Based Organizational Change. LaJolla, Calif.: University Associates, 1977.
- Hauser, D., Pecorella, P., & Wissler, A. Survey Guided Development II: A Manual for Consultants. LaJolla, Calif.: University Associates, 1977.
- Headquarters, Department of the Army Letter 600-76-2, 3 May 1976. Subject: Organizational effectiveness (OE): Activities and training.
- Holmes, D., Strasel, H. C., Cosentino, C., Leader, G. C., Daltas, A. J., & Brimm, M. Survey feedback in combat units in the U.S. Army in Europe: A pilot project. ARI Research Problem Review 77-2, July 1977.
- Taylor, J., & Bowers, D. The survey of organizations: A machine-scored standardized questionnaire instrument. Ann Arbor: Institute for Social Research, 1972.

ARI FIELD UNIT**USAREUR**

ORGANIZATIONAL SURVEY

The purpose of this questionnaire is to gather information about unit management, activities, morale, and the actual day-to-day life in the unit. This information can be very helpful to your commander in planning improvements for the unit.

This information will be provided to your unit commander in a summarized form. Care will be taken so that no information will be provided to the commander that would allow any single individual to be specifically identified.

This is not a test, and there are no right or wrong answers. If the results are to be helpful, it is important that you answer all statements as honestly as possible. Please turn the page and read the instructions carefully before you begin responding to the statements.

Thank you very much for your cooperation in completing this questionnaire.

NOT TO BE SHOWN TO UNAUTHORIZED PERSONS. NOT TO BE REPRODUCED IN ANY FORM WITHOUT THE SPECIFIC PERMISSION OF THE TECHNICAL DIRECTOR OF THE U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES, OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PERSONNEL, DEPARTMENT OF THE ARMY.



INSTRUCTIONS

1. The questionnaire is designed for automatic scanning of your responses. Questions are answered by marking the appropriate answer space on a separate answer sheet.
2. Be sure to follow the answer sheet carefully. Match the numbers on the answer sheet with the numbers of each question.
3. Please use a soft pencil (no. 2 is ideal) and observe carefully these important requirements:
 - make heavy black marks that fill the space on the answer sheet
 - erase cleanly any answer you wish to change
 - make no stray markings of any kind
4. Please do not make any marks on the questionnaire.
5. Do not write your name anywhere either on the questionnaire or on the answer sheet.
6. There are two Sections to the questionnaire: Section A and Section B.
7. There is a total of 111 questions in Section A. All answer spaces higher than 111 in Section A should be blank when you finish.
8. The person administering this questionnaire will provide you with special instructions for completing Section B.
9. If you have any questions, raise your hand and someone will come to help you.
10. Now that you have completed the instructions, please turn to Section A (page 4) and begin with question 1. There is no time limit.

SECTION A

IMPORTANT: MARK ALL YOUR ANSWERS ON THE SEPARATE ANSWER SHEET.

DO NOT MAKE ANY MARKS IN THIS QUESTIONNAIRE BOOKLET.

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1. The information I receive down through formal channels is generally accurate.	(A)	(B)	(C)	(D)	(E)
2. I get all the information I need about what is going on in other sections or departments in my unit.	(A)	(B)	(C)	(D)	(E)
3. Work priorities are established in line with the unit's objectives.	(A)	(B)	(C)	(D)	(E)
4. Meetings in this unit generally accomplish meaningful objectives.	(A)	(B)	(C)	(D)	(E)
5. Decisions are made in this unit at those levels where the most adequate information is available.	(A)	(B)	(C)	(D)	(E)
6. Decisions are made in this unit after getting information from those who actually do the job.	(A)	(B)	(C)	(D)	(E)
7. People in my work group work hard.	(A)	(B)	(C)	(D)	(E)
8. I get a sense of accomplishment from the work I do.	(A)	(B)	(C)	(D)	(E)
9. I look forward to coming to work every day.	(A)	(B)	(C)	(D)	(E)
10. I want to contribute my best efforts to the unit's mission and my assigned tasks.	(A)	(B)	(C)	(D)	(E)
11. This unit has a real interest in the welfare of assigned personnel.	(A)	(B)	(C)	(D)	(E)
12. My job helps me to achieve my personal goals.	(A)	(B)	(C)	(D)	(E)
13. I have enough time off to take care of my personal and family needs.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
14. My performance evaluations and efficiency reports have been helpful to me.	(A)	(B)	(C)	(D)	(E)
15. This unit places a high emphasis on accomplishing the mission.	(A)	(B)	(C)	(D)	(E)
16. Workload and time factors are taken into consideration in planning our work group assignments.	(A)	(B)	(C)	(D)	(E)
17. I would like to stay in this unit as long as I can.	(A)	(B)	(C)	(D)	(E)
18. My unit is respected on this post.	(A)	(B)	(C)	(D)	(E)
19. The job I have is a respected one on this post.	(A)	(B)	(C)	(D)	(E)
20. I am not afraid to make an occasional mistake.	(A)	(B)	(C)	(D)	(E)
21. My unit is willing to try new or improved methods of doing work.	(A)	(B)	(C)	(D)	(E)
22. There is enough emphasis on competition in this unit.	(A)	(B)	(C)	(D)	(E)
23. Rules in this unit are enforced.	(A)	(B)	(C)	(D)	(E)
24. There is little interference from outside units in doing our work.	(A)	(B)	(C)	(D)	(E)
25. There is a good working relationship between civilian and military personnel in this unit.	(A)	(B)	(C)	(D)	(E)
26. My job is directly related to meeting the unit's goals.	(A)	(B)	(C)	(D)	(E)
27. This unit is able to respond to all the demands put on it to accomplish its mission.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
28. My supervisor lets me know when I have done my job well.	(A)	(B)	(C)	(D)	(E)
29. My supervisor makes it easy to tell him when things are not going as well as he expects.	(A)	(B)	(C)	(D)	(E)
30. When appropriate, my supervisor supports my decisions.	(A)	(B)	(C)	(D)	(E)
31. It is easy for me to get in to see my supervisor.	(A)	(B)	(C)	(D)	(E)
32. My supervisor emphasizes teamwork.	(A)	(B)	(C)	(D)	(E)
33. When there is disagreement, my supervisor encourages the people who work for him/her to openly discuss their differences.	(A)	(B)	(C)	(D)	(F)
34. I know what my work group is trying to accomplish.	(A)	(B)	(C)	(D)	(E)
35. My supervisor emphasizes mission accomplishment.	(A)	(B)	(C)	(D)	(E)
36. My supervisor encourages us to give our best effort.	(A)	(B)	(C)	(D)	(C)
37. My supervisor maintains high personal standards of performance.	(A)	(B)	(C)	(D)	(E)
38. Rarely do other people up the chain of command make conflicting demands on me while I am at work.	(A)	(B)	(C)	(D)	(E)
39. Unless I ask for help, my supervisor lets me do my work without interfering.	(A)	(B)	(C)	(D)	(F)
40. My supervisor gives clear instructions when he assigns me a task.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
41. My supervisor shows me how to improve my performance.	(A)	(B)	(C)	(D)	(E)
42. My supervisor helps me plan and schedule my work ahead of time.	(A)	(B)	(C)	(D)	(E)
43. My supervisor ensures that all required materials are available to accomplish the job.	(A)	(B)	(C)	(D)	(E)
44. My supervisor is able to be heard by and influence those above him.	(A)	(B)	(C)	(D)	(E)
45. My supervisor is highly regarded as a leader by members of my work group.	(A)	(B)	(C)	(D)	(E)
46. My co-workers tell me when they think I have done a good job.	(A)	(B)	(C)	(D)	(E)
47. I have the trust and support of my co-workers.	(A)	(B)	(C)	(D)	(E)
48. My co-workers work together as a team.	(A)	(B)	(C)	(D)	(E)
49. My co-workers encourage each other to give their best effort.	(A)	(B)	(C)	(D)	(E)
50. My co-workers maintain high standards of performance.	(A)	(B)	(C)	(D)	(E)
51. Open and honest discussion is used when there are disagreements among my co-workers.	(A)	(B)	(C)	(D)	(E)
52. My co-workers provide the help I need so I can plan, organize and schedule work ahead of time.	(A)	(B)	(C)	(D)	(E)
53. My co-workers offer each other new ideas for solving job related problems.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
54. I feel that I am given adequate authority to perform the tasks and responsibilities assigned to me.	(A)	(B)	(C)	(D)	(E)
55. I am able to influence my co-workers when we are making group decisions.	(A)	(B)	(C)	(D)	(E)
56. Information important to our work is widely exchanged within my work group.	(A)	(B)	(C)	(D)	(E)
57. My work group plans together and coordinates its efforts.	(A)	(B)	(C)	(D)	(E)
58. I understand what is expected of me on my job.	(A)	(B)	(C)	(D)	(E)
59. My work group is able to respond on short notice to heavy work demands placed upon it.	(A)	(B)	(C)	(D)	(E)
60. My work group meets all requirements placed on it by higher levels of command.	(A)	(B)	(C)	(D)	(E)
61. The supplies and equipment I receive are adequate to perform my work.	(A)	(B)	(C)	(D)	(E)
62. I am working in the job area for which I have been trained.	(A)	(B)	(C)	(D)	(E)
63. I am getting the training I need to take on more responsibility.	(A)	(B)	(C)	(D)	(E)
64. My supervisor is trained for his job.	(A)	(B)	(C)	(D)	(E)
65. My work group has sufficient qualified personnel to accomplish its mission.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING →

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
66. Army standards of order and discipline are maintained in my work group.	(A)	(B)	(C)	(D)	(E)
67. Members of my work group reflect Army standards of military courtesy, appearance and grooming.	(A)	(B)	(C)	(D)	(E)
68. Cooperation is encouraged between work groups in my unit.	(A)	(B)	(C)	(D)	(E)
69. When I am doing a job that requires the assistance of another work group, I usually receive the help I need.	(A)	(B)	(C)	(D)	(E)
70. Administering of discipline in my unit is done fairly.	(A)	(B)	(C)	(D)	(E)
71. I receive fair and objective efficiency reports in this unit.	(A)	(B)	(C)	(D)	(E)
72. My job provides opportunity for me to advance my skills and/or personal education.	(A)	(B)	(C)	(D)	(E)
73. I know what I have to do to get recognized for doing a good job.	(A)	(B)	(C)	(D)	(E)
74. Work assignments are fairly made in this unit.	(A)	(B)	(C)	(D)	(E)
75. This unit recognizes a person for what he/she does and not just by favoritism.	(A)	(B)	(C)	(D)	(E)
76. Racial problems in my unit are confronted and dealt with fairly.	(A)	(B)	(C)	(D)	(E)
77. A spirit of cooperation exists among races in my unit.	(A)	(B)	(C)	(D)	(E)
78. My unit does not have a drug problem.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
79. Excessive drinking is not a problem in my unit.	(A)	(B)	(C)	(D)	(E)
80. Officers in this unit care more about their own welfare than the welfare of the troops.	(A)	(B)	(C)	(D)	(E)
81. Things are done with little or no pre-planning in this unit.	(A)	(B)	(C)	(D)	(E)
82. You get in trouble if you ask "why?"	(A)	(B)	(C)	(D)	(E)
83. During inspections of our unit each HQ has its own set of standards instead of the same standards for everybody.	(A)	(B)	(C)	(D)	(E)
84. Officers in this unit often don't use the chain of command.	(A)	(B)	(C)	(D)	(E)
85. NCOs in this unit get mad if they are called out at night.	(A)	(B)	(C)	(D)	(E)
86. Senior NCOs in this unit are afraid of the officers.	(A)	(B)	(C)	(D)	(E)
87. Senior NCOs in this unit won't protect their men.	(A)	(B)	(C)	(D)	(E)
88. NCOs and officers in this unit don't seem to think before they act.	(A)	(B)	(C)	(D)	(E)
89. Most EM in this unit will take a reasonable order	(A)	(B)	(C)	(D)	(E)
90. You can't afford to fail or make a mistake in this unit.	(A)	(B)	(C)	(D)	(E)
91. Seeking help is a sign of weakness in this unit.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
92. "Cover Your Butt" is the name of the game in this unit.	(A)	(B)	(C)	(D)	(E)
93. The primary concern of the officers in this unit is getting promoted at any cost.	(A)	(B)	(C)	(D)	(E)
94. Priorities keep changing in this unit.	(A)	(B)	(C)	(D)	(E)
95. The only way to get action taken on a problem in this unit is to go to the IG.	(A)	(B)	(C)	(D)	(E)
96. We hardly ever follow established procedures in this unit.	(A)	(B)	(C)	(D)	(E)
97. On the whole, the Army gives me a chance to show what I can do.	(A)	(B)	(C)	(D)	(E)
98. I would rather be in my present Army job than any other Army job.	(A)	(B)	(C)	(D)	(E)
99. I usually feel that what I am doing in the Army is worthwhile.	(A)	(B)	(C)	(D)	(E)
100. I am interested in my present Army job.	(A)	(B)	(C)	(D)	(E)
101. I am in good humor and happy.	(A)	(B)	(C)	(D)	(E)
102. I am daydreaming more than usual.	(A)	(B)	(C)	(D)	(E)
103. I wish people would let me alone.	(A)	(B)	(C)	(D)	(E)
104. I have unpleasant feelings in my stomach lately.	(A)	(B)	(C)	(D)	(E)
105. I feel sluggish a great deal of the time.	(A)	(B)	(C)	(D)	(E)

NOTE: BE SURE OF THE ANSWER CATEGORIES
YOU ARE USING

PLEASE MARK ONE SPACE ON THE
ANSWER SHEET FOR EACH QUESTION

Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
_____	_____	_____	_____	_____

QUESTIONS 106 TO 109 ARE FOR MARRIED,
ACCOMPANIED PERSONNEL ONLY:

- | | | | | | |
|-----------------------------------------------------------------------|-----|-----|-----|-----|-----|
| 106. My present Army job leaves me enough
time for family life. | (A) | (B) | (C) | (D) | (E) |
| 107. My present Army job has put a lot of
pressure on my marriage. | (A) | (B) | (C) | (D) | (E) |
| 108. My spouse isn't happy with my present
assignment. | (A) | (B) | (C) | (D) | (E) |
| 109. I worry about the well being of my
family while I am on duty | (A) | (B) | (C) | (D) | (E) |

NOTE: ANSWER CATEGORIES ARE CHANGED FOR
THE NEXT TWO QUESTIONS

- | | | | | |
|---------------------------------|----------|----------|----------|----------|
| | Officer | E7 to E8 | E5 to E6 | E1 to E4 |
| | _____ | _____ | _____ | _____ |
| 110. What is your present rank? | (A) | (B) | (C) | (D) |
| 111. What is your sex? | M
(A) | F
(B) | | |

S T O P

YOU HAVE COMPLETED SECTION A. YOUR LAST MARK IN SECTION A OF THE ANSWER SHEET SHOULD BE ON NUMBER 111. DO NOT MAKE ANY MORE MARKS IN SECTION A. TURN THE PAGE TO SECTION B AND BEGIN MARKING YOUR ANSWERS FOR SECTION B WITH NUMBER 1 IN SECTION B ON YOUR ANSWER SHEET.

SECTION B

The person administering this questionnaire will provide you with special instructions for completing Section B.

Please be sure to follow these special instructions, and to mark your answers beginning with number 1 in Section B of the answer sheet.



APPENDIX B

DEPARTMENT OF THE ARMY
U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
FIELD UNIT — USAREUR
APO 09403

PERI-OE

Dear Commander:

Here are the results of the recent organizational survey conducted at your headquarters. For your convenience, a copy of the survey is also included.

The computer printout includes an analysis of each of the 111 items of the survey. In reviewing the results, please note that 20 of the 111 items are written in the negative direction. A high score on one of these 20 items is a bad sign, while a high score on one of the remaining items is a good sign. The 20 negative items are: 80 through 88, 90 through 96, 102 through 105, and 107 through 109.

Instructions for Reading the Printout

On page 1 of your printout (the page number is at the upper right portion of the page) you will see the following information:

"VAR001 INFORMATION THROUGH CHANNELS IS ACCURATE"

This means that the analysis on page 1 is for the first item of the survey which is "1. The information I receive down through channels is generally accurate."

Beneath this heading is the item analysis information. At the left of the page are the category labels as found in the survey. These categories range in ascending order from "Strongly Agree" to "Strongly Disagree".

Moving to the right are the codes assigned to each category. On the survey these codes are represented as the letters "A" through "D". On the computer printout they are represented as the number "0" through "4" respectively. (We have represented these codes as numbers in the computer so we can compute averages, etc.) The computer printout contains an additional code which doesn't correspond to a code on the survey. This is the number "9" which is used to represent missing data; that is, it indicates when one or more people have left that item blank on their answer sheet.

Still moving to the right after the "code" column we find the "ABSOLUTE FREQUENCY" column. This is simply the number of people in your unit who chose each of the answer categories; and at the bottom of the column is

the total number of people in your unit who responded to the survey.

The next column to the right, "RELATIVE FREQUENCY (PERCENT)" is the percent of the total number of people who took the survey who answered in each category. The "ADJUSTED FREQUENCY (PERCENT)" column shows the percent of people who answered in each category adjusted for missing responses. This is the most meaningful column because it considers only people who have answered that item in the computation of the percentage.

The final column "CUMULATIVE ADJ FREQ (PERCENT)" gives a running total of percent of people answering in each category, again adjusting for missing data. This is a useful column because it allows the reader to see at a glance more of the total picture of the data.

At the bottom of the page are two summary statistics, the mean and the median. The mean is the simple average of scores across all respondents. The median is the midpoint of scores; that is, the point at which 50% of the respondents scored higher and, correspondingly, 50% scored lower. The median is probably the more meaningful of the two statistics.

Interpreting the Data

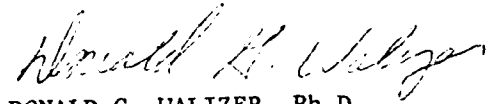
In the final analysis, you, the Commander, are the only person who can realistically interpret the data for your unit. Different Commanders have different styles, policies, and objectives. As a rule of thumb we would suggest that when 25% or more of your people have responded "Strongly Disagree" or "Disagree" to a positive item (or "Strongly Agree" or "Agree" to a negative item) there may be cause for some concern. This condition usually occurs when the median is 2.5 or smaller (1.5 or larger for negative items). Likewise, when 70% or more of your people have responded "Agree" or "Strongly Agree" ("Disagree" or "Strongly Disagree" for a negative item) this indicates a real strength in the unit. It is as important to identify and build upon strengths as it is to identify and correct weaknesses.

What Next

You may be interested to see how your unit stacks up with other units. As soon as all of the data are in and analyzed, group Commanders and the 32d AADCOM Chief of Staff will be provided with composite data which you can use for comparison purposes. (Remember, no higher Commander will receive data about your unit.)

You may also wish to have additional analyses made of your data. You can get the results broken down by rank (option 1), by sex (option 2), and by section - HQ vs DSP (option 3). A simple request to me will get you these additional analyses. State the options desired in your request. In many instances there are not enough responses to make a breakdown practical; and I will act accordingly.

Finally, remember that the Organizational Effectiveness Staff Officers assigned to the 32d are your resource and are equipped with the skills necessary to assist you in using these Data effectively.



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ORGANIZATIONAL SURVEY: COMMANDER'S GUIDE

The attached organizational survey is designed to provide the commander with valid, reliable, and useful information about the perceptions that the members of his work unit have about their work environment. These perceptions can be classified into three general areas:

1. Organizational Processes
2. Organizational Norms and Values
3. Impact of Organization on Individual

The survey consists of 111 statements (items). The work group members are to indicate the extent to which they agree or disagree with each statement. The following number code is used in the computer printouts:

- 0 = A = Strongly Disagree
- 1 = B = Somewhat Disagree
- 2 = C = Neutral
- 3 = D = Somewhat Agree
- 4 = E = Strongly Agree

Thus, if the computer printout shows a mean (average) of 2.5 for an item, the average response was between Neutral and Somewhat Agree on that item.

When reading the computer printout it is important to note that the variable number listed on the computer printout does not correspond directly to the item number on the survey. The variable number is always two (2) more than the item number. Thus, survey item number one (1) "The information I receive down through channels is generally accurate" is shown as variable number 003 (three) on the computer printout. (Variables 001 and 002 are confidential unit identification numbers.)

The 111 survey items are grouped conceptually into a number of indices. For example, survey items one and two comprise an index called Communication Flow. The index value is obtained by adding the item values and dividing by the number of items comprising that index. For example, if an individual responded with a three (D) to item one and a four (E) to item two, his value for the Communication Flow index would be 3.5 ($[3+4] \div 2 = 3.5$). Table 1 lists the survey indices and provides a cross reference to the survey and the computer printout. Table 2 provides a verbal description of each index.

Table 1
ORGANIZATIONAL SURVEY INDICES

<u>Index Dimension and Name</u>	<u>Item Nos. on Survey</u>	<u>Variable Nos. on Printout</u>
A. Organizational Processes		
1. Communication Flow	1-2	3-4
2. Decision-making	3-6	5-8
3. Motivation	7-10	9-12
4. Integration of Personnel and Mission	11-16	13-18
5. Identification with Unit	17-19	19-21
6. General Climate	20-27	22-29
7. Supervisory Leadership Support	28-31	30-33
8. Supervisory Leadership Teamwork Emphasis	32-33	34-35
9. Supervisory Leadership Goal Emphasis	34-37	36-39
10. Supervisory Leadership Work Facilitation	38-43	40-45
11. Supervisory Leadership Influence	44-45	46-47
12. Co-Worker Interaction Support	46-47	48-49
13. Co-Worker Interaction Teamwork	48-41	50-53
14. Co-Worker Interaction Work Facilitation	52-53	54-44
15. Co-Worker Interaction Peer Influence	54-55	56-57
16. Work Group Coordination	56-57	58-59
17. Work Group Readiness	58-65	60-67
18. Work Group Discipline	66-67	68-69
19. Intergroup Cooperation	68-69	70-71
B. Unit Norms and Values	80-98	82-100
C. Individual Outcomes		
1. Equal Opportunity	70-79	72-81
2. Job Satisfaction	99-102	101-104
3. Personal Adjustment	103-107	105-109
4. Family Life	108-111	110-113

Table 2
ORGANIZATIONAL SURVEY INDEX DESCRIPTIONS

A. Organizational Processes

1. Communication Flow. Unit leadership understands the work and problems of the command. Information flows freely through the chain of command, easily from the work groups to a listening and responsive leadership, and easily to the work groups concerning plans and problems facing the unit.

SURVEY 1-2

PRINTOUT 3-4

2. Decision-making. Information is widely based within the unit and decisions are made at those levels where the most adequate information is available. Supervisors seek out information before making decisions.

SURVEY 3-6

PRINTOUT 5-8

3. Motivation. The unit motivates personnel to contribute their best efforts through rewards for good performance and career enhancing duties.

SURVEY 7-10

PRINTOUT 9-12

4. Integration of Personnel and Mission. The extent to which a unit shows concern for human resources in the way it organizes its personnel to achieve its mission. The degree to which personnel within the unit perceive that the organization and assignment of work sensibly considers the human element.

SURVEY 11-16

PRINTOUT 13-18

5. Identification with Unit. The degree in which personnel are willing to see the unit as respected and be willing to be associated with it.

SURVEY 17-19

PRINTOUT 19-21

6. General Climate. These statements provide useful unit data in and of themselves; however, they do not easily group with other statements in the survey.

SURVEY 20-27

PRINTOUT 22-29

7. Supervisory Leadership Support. There is a good general feeling among subordinates about how they are treated by their leaders. Leaders behave in a way which increases the subordinates' feelings of worth and dignity by being approachable.

SURVEY 28-31

PRINTOUT 30-33

8. Supervisory Leadership Teamwork Emphasis. Supervisors encourage subordinates to develop close, cooperative working relationships with one another.

SURVEY 32-33

PRINTOUT 34-35

9. Supervisory Leadership Goal Emphasis. High standards of performance are clearly set, maintained and encouraged by supervisors.

SURVEY 34-37

PRINTOUT 36-39

10. Supervisory Leadership Work Facilitation. Supervisors help subordinates improve performance. Subordinates and supervisors work together to solve problems which hinder task completion and performance.

SURVEY 38-43

PRINTOUT 40-45

11. Supervisory Leadership Influence. The amount of positive influence a supervisor has with his superiors and subordinates.

SURVEY 44-45

PRINTOUT 46-47

12. Coworker Support. Subordinates behave toward each other in a manner which enhances each member's feeling of personal worth.

SURVEY 46-47

PRINTOUT 48-49

13. Coworker Teamwork. The behavior of work group members encourages the development of close, cooperative working relationships. Work group members maintain and encourage high standards of performance, even in conflict situations.

SURVEY 48-51

PRINTOUT 50-53

14. Coworker Work Facilitation. Work group members help each other improve performance. The work group works together to solve problems which hinder performance and task completion.

SURVEY 52-53

PRINTOUT 54-55

15. Coworker Peer Influence. Co-workers have power to mutually influence one another and the group is not just run by cliques.

SURVEY 54-55

PRINTOUT 56-57

16. Work Group Coordination. Work group members plan, coordinate, and support each other effectively.

SURVEY 56-57

PRINTOUT 58-59

17. Work Group Readiness. The work group is able to adapt to emergency situations and meet its mission.

SURVEY 58-65

PRINTOUT 60-67

18. Work Group Discipline. Work group members maintain Army standards of discipline and decorum.

SURVEY 66-67

PRINTOUT 68-69

19. Intergroup Cooperation. Work groups in a unit work together effectively.

SURVEY 68-69

PRINTOUT 70-71

B. Unit Norms and Values

The shared rules or guides to behavior in the unit are supportive of both the mission and the people.

SURVEY 80-98

PRINTOUT 82-100

C. Individual Outcomes

1. Equal Opportunity. The unit insures fair treatment for all personnel in such areas as job assignment, advancement, education, rewards and punishments.

SURVEY 70-79

PRINTOUT 72-81

2. Job Satisfaction. Measures the degree of overall satisfaction with Army job.

SURVEY 99-102

PRINTOUT 101-103

3. Personal Adjustment. Measures the degree to which the individual soldier has a feeling of adjustment and well being.

SURVEY 103-107

PRINTOUT 105-109

4. Family Life. Work unit demands do not put undue stress on the soldier's family life.

SURVEY 108-111

PRINTOUT 110-113

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